

## ABSTRACT

The invention concerns peptides of mammals having a urotensin II (UII) structure, and their uses as medicines, in particular in the form of a composition for treating neurodegenerative diseases or traumatism of the spinal cord. Said polypeptides comprise at their C-terminal end a heptapeptide with the following sequence: Cys-Phe-Trp-Lys-Tyr-Cys-Xaa wherein Xaa represents Val or Ile characterised in that they belong to the family of urotensin II and they have at least 45 %, and preferably at least 70 % similarity with the polypeptide of sequence SEQ ID N O :1, corresponding to the human prepro-urotensin II. The invention also concerns nucleic acid sequences coding for said polypeptides, oligonucleotides included in said sequences, and the use of said sequences as primers and probes and for expressing urotensin II of mammals. The invention also concerns the use of said polypeptides for selecting hypertension activity antagonists.